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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,590	04/15/2004	Reinhold Kammann	SC 073	8175
7:	590 06/02/2006	EXAMINER		
PMB 347 16690 Champion Forest Drive			BOMAR, THOMAS S	
Spring, TX 77379-7023			ART UNIT	PAPER NUMBER
1 0			3672	
			DATE MAILED: 06/02/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/825,590	KAMMANN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Shane Bomar	3672				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tirr rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 Ap	oril 2004.					
• • • • • • • • • • • • • • • • • • • •	action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) <u>1-46</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	vn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-46</u> is/are rejected.						
	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>12 October 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priority documents</li> <li>* See the attached detailed Office action for a list</li> </ul>	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)  1)   Notice of References Cited (PTO-892)	. 4) 🔲 Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate				
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>11/15/04</u>.</li> </ol>	Patent Application (PTO-152)					

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### **DETAILED ACTION**

## Claim Objections

1. Claims 8, 28, 30, 33, 41, and 46 are objected to because of the following informalities:

- a. the recitation of "the pipe" in claim 8 lacks proper antecedent basis in claim 2;
- b. likewise, claims 28, 30, and 33 suffer from antecedent basis errors that might be corrected by simply changing the dependencies of the claims, i.e., claim 28 should depend from claim 27, claim 30 from claim 29, and claim 33 from claim 23;
- c. the recitation of "having a central hole therethrough" in line 3 of claim 41 appears to be redundant; and
- d. the word --the-- should be added between "with" and "antenna" in line 8 of claim46. Appropriate correction is required.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-13, 16-19, 21-24, 35, and 37-46 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent application publication 20020133942 to Kenison et al.

Kenison et al disclose a body 506 with two spaced apart ends, such as pin and box ends, wherein a radio frequency identification (RFID) apparatus is disposed in a recess 508 of the pin end, the RFID further comprising an antenna 302 that encircles the end of the body and includes

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integrated circuit 304 (see Figs. 2L and 2X; paragraphs 0087-0092, 0111, and 0112). The RFID is held in the recess by protective material 314, wherein the recess can have multiple shapes (see Figs. 2P-2V; it is also noted that the circumferential RFIDs embodied by Figs. 2L-2Y are interchangeable as seen in paragraphs 0087, 0093, and 0095). In describing the application of the RFID in a wellbore environment in paragraphs 0076-0080 and 0136-0150, a method for sensing the RFID is also disclosed; wherein the RFID is sensed by its numerical code, or indicia, and the tubular is inherently handled by a handling apparatus. Since Kenison et al disclose the currently claimed apparatus, then the method for making the apparatus is inherently already known to exist.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. Claims 14, 15, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenison et al.

Regarding claims 14 and 15, Kenison et al teach the member of claim 10 with an RFID in one end, i.e., the pin end, of a casing joint. While the description broadly describes the RFID being paced in *an end* of a casing joint (emphasis added), the figures only show the RFID in one end. However, at the time the invention was made, it would have been obvious to one of ordinary skill in the art that two RFIDs can be placed in the same casing joint, one at each end, using the same technique for placement as with one RFID. One would have been motivated to make such a combination because Kenison et al are not limited to just one RFID in a whole string of tubulars, therefore having the RFIDs in two ends of one casing joint means that only every other tubing joint requires the specialized recesses to accommodate the RFIDs, which would also mean that reduced costs would be realized by only needing half of said specialized joints.

Regarding claim 20, Kenison et al teach that a secondary RFID 105a/b is in an exterior recess in the wall of the tubular (see Figs. 10A-B), the secondary RFID sensing the activation of a sliding sleeve valve 130. Since Kenison et al show that the circular ring RFID 500 of Figure 2X can be used in any tubular, then, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to have the RFID 500 in one of the ends of the tubular in Figure 10A. This would provide the capability of sensing the identification of the particular tubular as well as if the sliding sleeve 130 is opened or closed.

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7. Claims 25-34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenison et al in view of US patent application publication 20020014966 to Strassner et al.

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While Kenison et al teach the method for sensing a wave energizable RFID of claim 23, the reference is silent to the actual handling equipment and controls needed to convey the tubular string into the borehole.

Strassner et al teach a method for sensing a wave energizable RFID similar to that of Kenison et al. It is further taught that the method includes controlling the sensing, energizing, and handling apparatuses with a computer, wherein the method also includes identifying and analyzing the signals produced from the RFID (see paragraphs 0018, 0019, and 0036, as well as claim 12). It would have been obvious to one of ordinary skill in the art, having the teachings of Kenison et al and Strassner et al before him at the time the invention was made, to modify the method taught by Kenison et al to include the steps of controlling the equipment with the computer of Strassner et al, in order to obtain a method for a drilling operation that includes identifying drilling components and communicating that information remotely to the drilling system (see paragraph 0002 of Strassner et al). One would have been motivated to make such a combination because the Applicant has admitted in paragraphs 67-75 of the current specification that Strassner et al's computer control of the identification system is notoriously known in the art.

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Regarding claim 33 (as best understood to depend from claim 23), the combination applied to claim 23 also teaches that the identification code received from the RFID is then sent to the computer to determine the component's age, weakness, and previous usage (see paragraphs 0018-0019 and Fig. 1B of Strassner et al). Therefore, the computer is acting as an inspection system upon receipt of a secondary signal from the reader 102.

#### Conclusion

- 8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Berthon teaches an antenna ring of particular interest. Duhon teaches an RFID encircling the end of a tubular as well as associated computer programs for controlling the sensing equipment. Den Boer et al, Floerke et al, and Pacault et al teach various ways of embedding instruments in the end of tubular members.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shane Bomar whose telephone number is 571-272-7026. The examiner can normally be reached on Monday Thursday from 6:30am to 4:00pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Supervisory Patent Examiner

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tsb / 6 / 2006